

**Notice of Allowability**

Application No.

10/526,541

Applicant(s)

THOLE ET AL.

Examiner

Art Unit

Magali P. Slawski

1795

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 6/25/2010.
2. ☒ The allowed claim(s) is/are 3-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                            |                                                                                                              |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                                            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>8/5/2010</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                          |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|                                                                                                            | 9. <input type="checkbox"/> Other _____.                                                                     |

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael E. Whitham on August 6, 2010.

The application has been amended as follows:

**Claims 1 and 2** were cancelled.

In **claim 3**, after "under a water vapor atmosphere" inserted "in a blow line".

The following is an examiner's statement of reasons for allowance:

Prompted by the amendment filed June 25, 2010, the examiner found new art. The prior art of record closest to amended independent **claim 3** is Björhaag et al. (US 4,902, 445), henceforth **Björhaag**. Björhaag teaches adding sodium water glass to chips (4:40-44), where "water glass" is a solution of alkali silicate in water (1:37) and therefore an inorganic solution based on sodium silicate and "chips" are woodchips (2:3-4), which are lignocellulosic fibrous materials. Björhaag teaches spreading the mixture on a plate (4:44-45), thereby forming a fibrous non-woven, and compressing it to a density of 880 kg/m<sup>3</sup>, which falls within the claimed range. Björhaag teaches

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heating the material at 155 °C in order to form the finished product, which the examiner reads as curing. 155 °C exceeds the claimed minimum curing temperature.

The allowable features that Björhaag does not teach are

- (a) the addition of the liquid water glass in a blow line,
- (b) the water vapor atmosphere in the blow line and
- (c) the mixing temperature between 105 °C and 180 °C.

As Applicant has argued, it would not have been obvious to one of ordinary skill in the art to add liquid water glass to the fibers in a blow line because the water glass would have been expected to dry up and the alkali silicates therein to settle away from the wood chips. Introducing water vapor into the blow line prevents the liquid water glass from drying and allows it to mix effectively with the chips. The water vapor also makes it possible to mix the liquid water glass with the chips without the water glass's hardening at elevated temperatures—specifically at the claimed mixing temperatures. Because the related prior art of record does not teach or suggest any of these steps, it would not have been obvious to one of ordinary skill in the art to arrive at the invention of amended claim 3.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magali P. Slawski whose telephone number is (571) 270-3960. The examiner can normally be reached on Monday through Friday 9:00 a.m. to 6:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer K. Michener can be reached on (571) 272-1424. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer K. Michener/  
Supervisory Patent Examiner, Art Unit 1795

/Magali P. Slawski/  
Examiner, Art Unit 1795